

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL C.—THURSDAY, JUNE 19, 1879.—NO. 25.

THE EXTRIPATION OF THE OVARIES FOR SOME OF THE DISORDERS OF MENSTRUAL LIFE.¹

BY WILLIAM GOODELL, A. M., M. D.,

Clinical Professor of Diseases of Women, University of Pennsylvania, etc.

CASE I. My first case was that of a maiden lady, aged thirty-three, who had for many years been a great sufferer. She was never wholly free from pain, but one week before each monthly period this pain began to increase, and steadily grew worse, until it became unbearable. The menstrual flux then appeared, but with no abatement of her sufferings. It lasted fully a week, and was always profuse, sometimes alarmingly so. Then followed a week of gradual lessening of all these distressing symptoms. Thus three weeks out of every four were virtually spent by her in bed, and the remaining time was not long enough for her to recruit her powers and husband her strength for the next encounter with her monthly foe.

Worn out by loss of blood and by her acute pains, which were deemed nervous, she consulted Dr. S. Weir Mitchell. He at once discovered an abdominal tumor, and asked me to see her.

The lady was pale, thin, and bloodless, with a face furrowed by acute suffering. I found a virginal cervix lodged on the symphysis pubis, and a sharply anteflexed womb imbedded in the hilus of a large and kidney-shaped fibroid tumor. Although the sound gave a measurement of but three inches, the tumor dipped down to the bottom of Douglas's pouch, and reached up to a point two fingers' breadth above the navel and to its left. The fibroid was plainly subperitoneal, and not amenable to treatment per vaginam.

Thereafter Dr. Mitchell and I met frequently, and did all that we could to alleviate the pain and lessen the bleeding, but without any success whatever. She grew rapidly worse, and it was finally decided to extirpate the womb. While waiting for the hot weather to pass by, I came across a successful case of the same nature cured by Trenholme, of Montreal, by the removal of both ovaries. We therefore determined to try this operation before resorting to the major one, and she gave us no peace until the day was fixed upon. Accordingly, on October 4,

¹ Abstract of a paper read before the Pennsylvania State Medical Society.

1877, with the aid of Drs. S. Weir Mitchell, John Ashhurst, Charles T. Hunter, B. F. Baer, and W. H. Heath, I removed both ovaries by the vaginal incision. The haemorrhage was very trifling during the operation; no vessel needed tying, and not a suture was put into the vaginal wound. The right ovary looked healthy, but the left contained a small cyst.

The immediate effect on the lady was most remarkable. From that day she lost all those pains and aches which had imbibited her menstrual and intermenstrual life, and they have never returned. The large fibroid tumor also rapidly lessened in size, until, six months later, it was no larger than a horse-chestnut. At that size it has since remained, but is giving her no trouble whatever. From being a bedridden invalid she now takes charge of her mother's house, and is able to do many other things beside. Last evening, Dr. John Ashhurst casually informed me that, with a friend of his, she had a few days ago walked four miles into the country after wild flowers. Her menses have never returned, but their absence has not made any appreciable effect upon her appearance or upon her character. She is just the same in these respects as she was before the operation.

In addition to this case I have collected in my work on Gynaecology¹ eleven others, making twelve in all, in which the operation of spaying was performed for fibroid tumor of the womb. Of these, three proved fatal, but in each of them the ovaries were removed by the more hazardous abdominal incision. In one, operated on by Hegar, of Freiburg, the tumor grew smaller for five months, and the menstrual flux was absent; then a haemorrhage took place, and an increase in the growth was observed, but unfortunately the patient was soon after lost sight of. In the remaining eight, including my own case, convalescence was uninterrupted, the menopause was established, the tumor became smaller, and the women were virtually cured.

Now I do not by any manner of means propose the removal of the ovaries as the sole means of curing a troublesome fibroid tumor of the womb. Whenever one so bulges into the cavity of the womb as to be reachable it ought to be enucleated. In this manner I have removed several interstitial fibroid tumors, one of them weighing twenty ounces. Then again we must not forget the incision of the capsule, the hypodermic use of ergotine, and other means devised for the treatment of these growths. But whenever the tumor is irremediable by such means I believe spaying to be a perfectly legitimate operation, and one which will be found very successful.

CASE II. This was an unmarried lady of twenty-seven, who had great haemorrhage at her menstrual periods and exquisite suffering, not only at these times, but for a week before and after. Her physician

¹ *Lessons in Gynaecology*, page 275.

called me in to see her several times, but I was powerless to do any good whatever. Her troubles seemed to start from turgid and neuralgic ovaries, for the womb showed no lesion whatever, and the pains radiated from each ovarian region. She had violent headaches, great emaciation, — weighing sixty-seven pounds only, — and exhibited mental disturbances which threatened insanity. I finally recommended the rest cure, but this did her very little good, although she was under the skillful supervision of Dr. S. Weir Mitchell, and fattened up to eighty-three pounds. It was the worst case but one of pernicious menstruation that I have ever seen. Finally, after due deliberation, the removal of the ovaries was decided upon by us, and proposed to her. She at once consented, and I performed the operation per vaginam, being aided by her physician and by two other medical friends.

One stalk was tied with silk, the other with gut ; this latter broke, and that stalk was then crushed off with the écraseur. Her recovery was a slow one, being retarded by a small pelvic abscess, which burst through the incision, and discharged the knot of the silk ligature. Menstruation did not return, and she became wonderfully better, so much so as to astonish her friends, who were all ignorant of the nature of the operation. The secret has been well kept ; her father, the other members of her family, and the servants in the house are to this day unaware of what took place. Beside her mother and the physicians present no other soul knows that she is without ovaries. Nor is the slightest change of voice, of appearance, or of character perceptible. She mingles in society, and is just as womanly and as womanish as she was before the operation. She has simply reached the climacteric somewhat abruptly, as Kœberlé calls it. Not long ago her physician informed me that "she deemed herself perfectly well, and had told him that he need never call again as a physician, but as a friend." She has a large circle of friends, many of whom have complimented me on the successful issue of my treatment, and have asked questions so hard to parry that I trust the recording angel has dropped a tear over each entry of my answers.

CASE III. This was a married lady, aged thirty-seven, and the mother of three children, the youngest ten years old. She must have sustained some injury from the birth of this last child, for she never conceived again, and was never well afterwards. Agonizing pelvic pains at first ushered in the monthly periods, then kept up for some time afterwards, and finally never left her. She now became bedridden and an opium eater. Early in May, 1878, I was called in to see her by her physician, Dr. A. C. Deakyne, who had faithfully attended her for two years, and had exhausted every means known to medicine. A more wretched creature I never saw. She was reduced to skin and bones, and bore on her face the lines and furrows of the keenest anguish. The womb was in its place, and presented no other lesion than a slight

enlargement. After a careful examination I was forced to the conviction that it was a typical case of neuralgic ovaries, with nerve storms radiating from them and breaking upon every other organ in the body. It was by far the worst case of pernicious menstruation that I have ever seen. Dr. Deakyne himself had come to the conclusion that no relief short of spaying would do her good, and he had therefore called me in. I agreed with him in this opinion, and we received the hearty concurrence of the poor woman, who was willing to face death in any shape for a promise of relief. The operation was performed on May 26th, just after she had passed through a catamenial tempest of unusual severity. Drs. Deakyne, T. M. Drysdale, E. L. Duer, L. A. Dix, and Henry F. Baxter kindly helped me on the occasion. There was no difficulty whatever in catching the ovaries through the vaginal incision and in removing them, but the haemorrhage was freer than usual. Both ovaries seemed congested, and one bore a beautiful false corpus luteum. For four and twenty hours great relief was experienced, and everything looked promising, but on the next day a slight peritonitis set in. It was limited to the pelvic regions, but having no strength she died on the fourth day.

While deeply deplored the result, I do not look back upon this case with any misgivings as to the propriety of the course pursued, for I do not believe that anything short of the extirpation of her ovaries would have cured her. But I do not wish to be understood as recommending this operation for every case of ovaralgia, for I have seen too many cases cured by rest, by a milk diet, by massage, and by electricity, which is the treatment that I would recommend as a very efficacious one in the milder forms of this very stubborn disease.

CASE IV. This was a married lady, thirty-eight years old, whose brain gave way from over-anxiety and from over-nursing a sick child during the summer of 1875. The first token of insanity was night terrors, which began to afflict her for two or three days before the appearance of her catamenia. These steadily grew worse until I saw her in September, 1878. At that time she presented the following symptoms: Several days before the appearance of her menses, to use the language of her husband, who is a clergyman, "hallucinations on every subject take complete possession of her, and she becomes so violent as to need locking up." These attacks last during the continuance of the menses and for a week afterwards. The remaining part of the inter-menstrual period, which lasts from a week to ten days, "she eats and sleeps enormously, like a plowman," and exhibits mere traces of her hallucinations. She has been an inmate of several insane asylums without benefit. Two distinguished alienists, however, held out hopes to her husband that with the change of life reason would return. Deeply impressed with this opinion, and with the conviction that the

climacteric could alone cure his wife, and having heard of one my cases of spaying, he brought his wife to me for the sole purpose, if I deemed it best, to bring on an artificial menopause.

I found a congested and a hypertrophied womb, measuring 3.5 inches, and the left ovarian region exquisitely tender; the ovaries, however, could not be outlined. These were all the discoverable lesions, but in view of the history of the case, and of the opinion of the two experts who had had her for several months under their charge, I consented to remove her ovaries.

This was accordingly done by a vaginal incision on November 23d, and I was aided in the operation by Dr. Joseph Parrish, Dr. Charles H. Thomas, Dr. B. F. Baer, and Dr. Angle. She did not have a single bad symptom following the operation, although she twice jumped out of bed, and had to be forcibly put back and held down. Her pulse and temperature never rose above the normal. On the eighth day, by dint of a little coaxing, I succeeded in persuading her to let me remove a single stitch that had been put in. After that she could not be kept in bed without undue violence, and I thought it best, as the less of the two evils, to let her get up. No harm whatever followed, but I am sorry to say that, although she has not to my knowledge menstruated since, her mental condition has not been improved.

Now, although this case was a failure, I cannot but think that the principles which governed my conduct are sound ones, and should I meet with a case of insanity limited to the catamenial periods I should not hesitate to remove the ovaries. So impressed, indeed, am I with the soundness of these views that it is my intention, in the course of a few days, to extirpate the ovaries from an epileptic young lady, whose first fit began at her first menstruation, and whose present fits pivot around the monthly flux as a centre.

How shall the operation of spaying be performed? By the abdominal incision the ovaries can always be removed; by the vaginal one, very generally. Each operation has its advocates, but I am a warm upholder of the latter, because it is the safer. I have elsewhere¹ collected and tabulated fifty-one cases of spaying, with fifteen deaths. In thirty-one cases the abdominal incision was employed, and was followed by eleven deaths; while out of twenty cases in which the ovaries were taken away through a vaginal incision, only four died. This smaller rate of mortality is attributable to the greatly lessened exposure of the peritonæum, and to the dependent drainage opening. By this operation, however, the ovaries cannot always be caught and removed. They may be carried up by a large fibroid tumor and lie beyond the reach of the finger, or they may be, as Sims² and Thomas³ found them, so

¹ Goodell's *Lessons in Gynaecology*, page 277.

² *Transactions American Gynaecological Society*, vol. i., page 352.

³ *British Medical Journal*, December, 1877.

bound down by firm adhesions as not to be dislodged. In my four cases I had no difficulty whatever in reaching the ovaries and in removing them per vaginam. So impressed, indeed, am I with the greater safety of this mode of operation that I shall always attempt it. Should it fail, the abdomen can afterwards be opened, and the abandoned vaginal incision be utilized, if needful, as a drainage opening. The abdominal operation should be performed under the spray, and every detail of Lister's should be scrupulously carried out. Of the great value of anti-septic surgery in cases needing the exposure of the peritoneal cavity there can be no question whatever. The wonderful successes of Keith and Thornton amply prove it. Not quite three weeks ago I removed, from a lady sent to me by Dr. A. H. Sheaffer, of Lewistown, a large fibro-cystic tumor of the womb through an incision extending from near the ensiform cartilage to the symphysis pubis, and needing twenty-three sutures to close. The tumor had no stalk, but springing directly from the womb had to be enucleated from its peritoneal capsule. Yet, thanks to the spray, the patient recovered without a single bad symptom, and with less constitutional disturbance than that which usually follows the removal of a small surface growth like an adipose tumor. In the vaginal operation I have not yet tried the spray, but I intend to do so, although Sims found that the constringing action of the carbolic acid incommodiously narrowed the calibre of the vagina.

If the abdominal incision be performed, the incision should extend from near the navel to a point as low down as is compatible with the safety of the bladder, and then each stalk should be tied with gut, and dropped within the cavity. In the vaginal operation, the patient should be placed on her back, and not on her side. I am satisfied that it was the lateral posture that helped to kill my third patient, for as soon as the peritonæum was opened the air rushed out and in during every inspiration and expiration,—an untoward circumstance which cannot happen in the dorsal posture. A duck-bill speculum is introduced, and the perinæum pulled downwards. The post-cervical mucous membrane is next caught up by a uterine tenaculum, and it and the underlying peritonæum are snipped open for about an inch with a pair of scissors, of which I have found Kuchenmeister's to be the best. The index finger of the left hand is then passed in, the womb pushed down from above by the right hand, and each ovary brought down to the incision by the finger hooked into the sling made by the oviduct. The ovary is now seized by a fenestrated forceps and brought into the vagina. The stalk is transfixed by passing a needle, armed with a double gut thread, between the ovarian ligament and the oviduct, and each half securely tied. The ovary is then removed, the ligatures cut off at the knot, and the stumps returned into the pelvic cavity. In order to hinder the chance of the protrusion of a bowel-loop, I have, in three instances,

closed the vaginal opening with one suture, and that either of silver or of gut; but in the case with the incision left unclosed no protrusion took place. The haemorrhage during the operation was in only one of my cases quite free, but it was venous, and needed no ligature.

There is one drawback to this operation. For some reason the removal of both ovaries does not always bring about the cessation of the menses. From a careful collection of all the published cases of double ovariotomy occurring during menstrual life, I find that out of one hundred and thirty-two cases there were fifteen in which regular monthly fluxes kept on, and nine in which such fluxes were either irregular or lessened in amount. The cause of this unexpected continuance of the menses has been attributed by Kœberlé to a portion of ovarian stroma unwittingly left behind, but I think it is often owing to the existence of a third or accessory ovary. Kocks found a third ovary attached to a womb removed by him for cancer.¹ The specimen was exhibited at the Medical Congress held last year at Cassel, and verified by Dr. A. R. Simpson, who happened to be present.² Puech has collected several such cases,³ while the lamented Beigel, in three hundred and fifty post-mortem examinations, found eight women with a third or accessory ovary, containing true ovarian stroma.⁴ These accessory ovaries range in size from a hemp-seed to that of a cherry, and are usually attached by a slender stalk. They very generally lie on the boundary line separating the peritonæum from the serous covering of the ovary. Beigel encountered three attached to one ovary, and Waldeyer as many as six. "On microscopic examination they were found to consist of normal ovarian tissues, and to contain Graafian follicles in every degree of development, as well as relics of corpora lutea and follicles which had dwindled without rupturing. The author concludes that both conception and also the pathological changes of normal ovaries may originate in these bodies. They may also have a bearing on the recurrence of menstruation after the complete removal of the ovaries." I cannot but think that this is the explanation of Atlee's two remarkable cases, in each of which one ovary having been removed, the other became so diseased as to need repeated tappings, and yet each woman not only menstruated, but gave birth to a child.⁵

Does the extirpation of the ovaries after puberty unsex a woman? So far as can be ascertained it does not; at least no more than castration after puberty unsexes a man. In the one the ability to inseminate is lost, in the other, the capability of being inseminated but in both

¹ Centralblatt für Chirurgie, No. 49, page 839.

² Edinburgh Medical Journal, January, 1879, page 512.

³ Annales de Gynécologie, January, 1879, page 78.

⁴ Obstetric Journal of Great Britain, July, 1877, page 286, from Wiener medizinische Wochenschrift, May 26, 1877.

⁵ Ovarian Tumors, pages 38 and 39.

the sexual feelings remain pretty much the same. Kœberlé, who has a large experience in double ovariotomies, avers that "the extirpation of both ovaries does not produce a single marked change in the general condition of the woman. She has simply attained the menopause abruptly." This opinion tallies with that expressed by Wells, Hegar, Peaslee, and Atlee, and is certainly confirmed by the history of my own patients, who are not conscious of any physical or psychological changes whatever.

The operation of spaying is yet in its infancy, and time is needed to develop its resources. But I cannot help feeling that in carefully selected cases it will prove the sole means for curing many mental and physical disorders of menstrual life which have hitherto baffled our science, and are a standing opprobrium to our profession.

DYSTOCIA FROM DORSAL DISPLACEMENT OF THE ARM.

BY C. H. BROCKWAY, M. D., LYNN, MASS.

THE above cause of obstructed labor may not be an uncommon one, but it is difficult of diagnosis, and has been seldom described by accoucheurs.

Simpson observed it, and advised the difficult manœuvre of bringing down the arm, and so converting the case into a hand-and-head presentation.

Tyler Smith quotes Simpson, but cites no case as having fallen under his own observation. He adds, "It would be well if accoucheurs meeting with such cases should put them on record." Playfair, in his excellent work on obstetrics, describes a case occurring in his own practice, in which he tried to get the head through the brim with forceps, and failed. He finally delivered by turning. So little attention has been given to this complication by obstetrical writers that I thought it might not be unwise to record my own experience in reference to it.

On the evening of May 26, 1878, I found Mrs. R. J., age twenty years, in labor with her first child. The lady, who was well built, had been in excellent health throughout her gestation, except that during the two weeks preceding labor she complained of pain in the abdomen on moving about, and as that region was very protuberant I ordered a well-fitting bandage to be worn until labor should begin. I saw her at nine P. M. of the day above mentioned, and learned from the nurse that she had suffered with well-marked pains since noon; these continued until four A. M., the day following, when the os was fully dilated, and the waters broke.

With a view to stimulating the womb to more active contraction, I then began gently to manipulate it externally, when I was surprised to

find on the left side, about half-way from the fundus, a spot that was quite tender on pressure, and also that the womb bulged out at that point, making its contour somewhat irregular. I was unable to satisfy myself in regard to the probable cause of this condition.

The head presented in the first position, and with difficulty entered the pelvic brim. Although the pelvis was roomy and the pains strong, the head advanced very slowly, seemingly out of all proportion to the expulsive force and good size of the pelvic cavity; but as it *did* advance, though with extreme labor, I thought it unwise to send for forceps, as my office was at a great distance. The lady complained much of the tender spot on the womb, and I ordered fomentations of hot rum to be applied. The head finally reached the perinaeum, and aided by the most powerful uterine and abdominal action it passed into the outer world. Although the expulsive force continued to be strong, the shoulders refused to come. Passing my hand into the vagina I found that the child's right arm was displaced, and lay across the back of its neck; hooking my finger into the axilla I brought down the arm across the chest, when the body was immediately expelled. The placenta came away in the course of an hour after the exhibition of ergot and the practice of considerable traction on the cord. The child's arm was much flattened and completely paralyzed, but as the bone was intact I gave a favorable prognosis.

The cause of the tender spot with the bulging of the uterine wall was now explained. It was evidently due to pressure exerted by some portion of the displaced member. After the *os uteri* was fully dilated this arm formed a bar which hitched against the pelvic brim, and prevented the head from entering freely, but the expulsive force was so great that the head and arm were pushed on, and the second stage of labor completed after three hours of powerful and continued uterine action. Had the presenting part failed to engage, an examination would have been made, and the offending arm doubtless discovered; but the pains being strong and the pelvis roomy the head was born, and the displaced arm was then revealed, owing to the delay in the expulsion of the shoulders. The child was a girl, weighing twelve pounds.

When in a case of dorsal displacement of the arm the head fails to engage in the brim, an effort should be made to bring down the arm as Simpson suggested, especially if the size of the pelvic cavity and the character of the pains give reason to believe that nature can effect delivery, as she did in my case even with the arm displaced.

The last time I visited my patient was nine days after delivery, when she was comfortable, and as far as I could judge every function was properly performed. I ordered her to be kept in bed several days longer. There was no tenderness of the womb remaining. While in the room I noticed that the child had acquired full use of her previously paralyzed arm.

A month later I was surprised to learn that a few days after my last visit the lady had been seized with some trouble in the abdomen, and through the influence of an officious relative had been suddenly removed out of the city, and put under the care of an irregular practitioner. What this affection was, and whether it had any relation to her accouchement, I was unable to learn.

EMBOLISM OF LEFT FEMORAL ARTERY CONSEQUENT ON VALVULAR HEART DISEASE; DEATH.

BY E. P. HURD, M. D., NEWBURYPORT.

MRS. R., aged forty-seven, had been since 1870 under my care for valvular heart disease. There were symptoms of both aortic and mitral insufficiency, and the case was so diagnosticated by me in 1870, Dr. F. I. Knight, of Boston, concurring. The leading features of the case were frequent attacks of pain over the heart, palpitation, and dyspnoea; these were at times most distressing. In 1878 she had pneumonia of right lung, with persistent cough, orthopnoea, and prostration. To the surprise of everybody she recovered from this illness, a troublesome cough remaining. Mrs. R. was always weak and anaemic, although her naturally energetic disposition kept her almost constantly at work. There was never any anasarca.

February 22, 1879, nine o'clock, a. m. Mrs. R. was suddenly seized with a violent pain in left lower extremity, which sometimes took the form of cramp of the muscles of the calf, sometimes was like a burning sensation in the foot. Associated with this pain there were coldness and numbness, — *anesthésie douloureuse*. Above the knee the natural sensibility and warmth were retained. Veins of foot and leg were distended, and there was stasis. *There was no pulse in left popliteal, nor was any pulse discoverable in any artery of the member supplied by that vessel.* Pulsation in the femoral at the base of Scarpa's triangle could be felt, but at no other part of its course. The circulation of the right lower extremity was normal.

Diagnosis. Embolism of femoral or popliteal. The clot had evidently been washed out of the left ventricle; it might have been formed during the transit of blood over a roughened aortic orifice.

Treatment. Whatever could make the patient most comfortable, a fatal issue being foreseen. The limb was wrapped in warm flannels; these, assiduously renewed, brought back heat.

The heart's action was weak, rapid, and tumultuous, as if that organ were becoming paralyzed from shock. It was a condition of *arystolie*. Tincture of digitalis in ten-drop doses every hour, in a tablespoonful of

brandy. Gilman's chlorodyne in teaspoonful doses every half hour for pain.¹ Two o'clock, p. m. A little abatement of pain. Pulse has improved somewhat under digitalis. There are two large patches of gangrened integument, of dark brown color and parchment feel, six or eight inches square, on the front and lateral aspect of the left leg; there is also a dark, "mummified" patch as large as the palm on the dorsum of the foot. The integument of the entire leg and foot is of purplish color, mottled here and there with streaks of livid extravasation, and for some distance above the knee punctiform petechiæ are abundant. Six p. m. Pain has been relieved by the chlorodyne. Brandy and milk have been freely given. Tincture of digitalis in fifteen-drop doses every two hours.

February 23d. A very feeble attempt at collateral circulation; the whole limb threatens to become gangrenous. Mrs. R. has slept a few hours. Pulse 100, weak and compressible; it is sudden and jerky, without any prolonged swell of the artery. There is a soft murmur, heard at base and apex, with both sounds of the heart. Complexion purplish and sallow; veins everywhere distended and prominent; pulsation of right jugular well marked.

February 24th, nine o'clock, a. m. Mrs. R. has vomited at intervals all night; medicine and nourishment have been necessarily suspended. Patient is prostrate, and apparently sinking. Digitalis, in twenty-drop doses of the tincture, caused her to rally somewhat, but at ten p. m. she died.

An autopsy was performed the next day, Drs. Howe, Healey, and Hurd being present. Only the thorax and abdomen were examined. Abdominal organs were healthy, with the exception of the liver, which was hyperæmic and hypertrophied; from incisions made with the scalpel venous blood flowed freely. Gall-bladder greatly distended. Heart enlarged and encroaching on left lung; pericardium full of fluid. Right side of heart hypertrophied and dilated; no valvular lesions. A firm and partly organized clot was attached to the musculi pectinati; it extended into the infundibulum of right ventricle. Left auricle was enormously enlarged, and the four pulmonary veins entering it looked like huge aneurismal pouches. Section of the auricle disclosed hypertrophy and dilatation; the mitral valve was contracted to a mere chink, firm and resisting, which the index finger could hardly be made to enter. This, when the ventricle was opened, was found to be due to agglutination of the segments of the valve by old inflammatory deposits, and to subsequent contraction and induration. The sigmoid valves of the aorta were rigid and indurated, opposing obstruction to the efflux of blood. Their incompetence to prevent regurgitation was shown by the usual test of

¹ For the formula of Gilman's chlorodyne I am indebted to a former number of the JOURNAL.

pouring water into the aorta. There was also thickening and dilatation of left ventricle, and general pulmonary congestion.

In this patient we had aortic constrictive, aortic regurgitant, mitral constrictive, mitral regurgitant, lesions, and a striking example of how much serious heart disease may be tolerated for a series of years, with a fair degree of general health and comfort, and ability to perform the ordinary duties of life.

Embolism of large arteries of the extremities in heart disease is generally if not always fatal, the patient dying from shock, or from inability of the heart to establish a sufficient collateral circulation.

The good effects of full doses of digitalis in this case were very manifest, and there is probably no other remedy that would have proved equally efficient.

ANNUAL MEETING OF THE MASSACHUSETTS MEDICAL SOCIETY.

THE usual initial meeting of the Massachusetts Medical Society was preceded during the forenoon by medical visits of the Fellows, and surgical operations before them at the hospitals. At the Massachusetts General Hospital Dr. H. J. Bigelow performed his operation for litholapaxy; Dr. C. B. Porter excised a parotid gland and exhibited surgical cases, among which was one of extrophy of the bladder, in which Dr. Porter had performed a successful plastic operation.

At the City Hospital, Dr. Thorndike amputated a breast, Dr. H. W. Williams operated for cataract, and Dr. Ingalls removed a fatty tumor and operated on a case of necrosis.

At Carney Hospital, Dr. Arthur Cabot applied Sayre's plaster jacket for the benefit of one of the Fellows.

During the afternoon of this day the Warren Museum at the Medical College, the Warren Museum of Natural History on Chestnut Street, Children's Hospital, and Museum of Natural History Society were visited by the Fellows.

The initial meeting was called to order promptly at twelve o'clock, in Horticultural Hall, on Tuesday, June 10th, by the president, Dr. George H. Lyman, who at once introduced the readers of papers, namely, Dr. Rollin C. Ward, of Northfield, who read an essay on The Physician's True Position in Society; Dr. James B. Ayer, of Boston, whose subject was Cases of Insanity following Acute Diseases; and Dr. George K. Sabine, of Brookline, whose paper was entitled Intestinal Catarrh of Infants.

In our report of the last annual meeting of the society the criticism was made that not one word of discussion was elicited by the papers then read. On this occasion, however, the president called upon the Fellows by name and asked for remarks. The result was a most interesting discussion upon the very excellent papers of Drs. Ayer and Sabine, in which many gentlemen took part. We trust the precedent thus established by Dr. Lyman may be

followed by future presidents on similar occasions. At the close of this meeting the president announced that since the Medico-Legal Society wished to occupy the afternoon he would adjourn until the following morning at nine o'clock.

At three p. m. of Tuesday the Medico-Legal Society was called to order by its president, Dr. Alfred Hosmer, who introduced the members appointed to read papers having a medico-legal bearing. They were as follows: A Digest of Returns from Members of the Society for the Year ending December 31, 1878, by Medical Examiner F. Winsor, M. D.; Duties of Officers under the Present Law of a Medical Examiners, and the Relations of the Community thereto, by associate member Hon. Asa French; Report of a Committee on Expert Testimony, What it is and What it should be; Report of a Committee on the Use of the Metric System of Weights and Measures in Forensic Medicine; A Medico-Legal Case of Abortion followed by Conviction, by medical examiner J. C. Gleason, M. D.; on Pathological Changes in Pyæmia and Septicaæmia, by associate member E. G. Cutler, M. D.; Evidences of Abortion derived from Clinical and Post-Mortem Teaching, by Medical Examiner C. C. Tower, M. D.; a paper on Death by Lightning, by Medical Examiner J. L. Sullivan, M. D., was deferred on account of insufficient time. Meeting then adjourned.

At a private meeting this society, save in one instance, relected its entire board of officers, the exception being the substitution of Medical Examiner Abbott, of Wakefield, in the place of Medical Examiner Winsor, as corresponding secretary.

At seven o'clock, p. m., the annual meeting of the councilors of the society was called to order by President Lyman in the hall of the Medical Library Building. The records of the last annual meeting were then read by the secretary, Dr. F. W. Goss, and were accepted. The nominating committee was next announced, and consisted of one Fellow from each district. On its return to the hall the chairman, Dr. Bronson, announced the slate for 1879-1880 as follows:—

President, Dr. George H. Lyman, Boston. Vice-President, Dr. David P. Smith, Springfield. Treasurer, Dr. Frank W. Draper, Boston. Corresponding Secretary, Dr. Charles W. Swan, Boston. Recording Secretary, Dr. F. W. Goss, Roxbury. Librarian, Dr. David H. Hayden, Boston. These officers were all elected by ballot. Following which the president nominated as

Orator, Dr. Thomas H. Gage, Worcester.

Anniversary Chairman, Dr. J. Collins Warren, Boston.

Committees: Of Arrangements, Drs. Robert Atnory, C. J. Blake, F. C. Shattuck, W. L. Richardson, J. O. Green, E. G. Cutler.

On Publications, Drs. G. C. Shattuck, R. M. Hodges, B. E. Cotting.

On Resignations, Drs. James Ayer, Francis Minot, J. C. White.

On Finances, Drs. C. D. Homans, W. W. Wellington, G. J. Arnold.

To procure Scientific Papers, Drs. H. W. Williams, Calvin Ellis, F. K. Paddock, G. S. Stebbins, J. R. Chadwick.

On Ethics and Discipline, Drs. Charles Howe, R. L. Hodgdon, G. J. Townsend, G. E. Francis, A. H. Johnson.

These nominations were accepted and the gentlemen elected.

Meanwhile the secretary read the names of new members, sixty-one in all; next, the list of Fellows deceased since the last annual meeting, in all thirty-three, their average age being 63 $\frac{1}{2}$ years.

The treasurer, Dr. Draper, presented his report, which in brief was: Received from all sources during the year, \$10,186.63; expenditures, \$8334.53; balance in treasury, \$1852.10. By a subsequent vote three fourths of this amount was distributed *pro rata* to the district societies.

The funded property of the society remains as it did at the last annual meeting. Total amount, \$33,124.73. The chairman of the auditing committee reporting that the treasurer's account was correct, it was accepted. The chairman of the committee on resignations then made his report, and his recommendations of gentlemen for resignation, retirement, and to be dropped for delinquency in dues were duly considered and acted upon according to the suggestions of the committee. The chairman also recommended Dr. Sapolini, of Milan, Italy, for appointment as honorary member. He was elected by subsequent ballot.

The report of committee on publications was next read by Dr. R. M. Hodges, and accepted.

The committee on by-laws represented through Dr. Hosmer, chairman, that their labors had been directed to comparison of by-laws of district societies with those of the parent society. It was found that they were uniform in all respects. Report accepted.

Committee on library, Dr. Stedman, reported in regard to number of exchanges from state societies received during the year. Dr. Stedman also announced that it had been suggested that members may be willing to give up their *Braithwaite* in order to swell the funds of the society. Circulars questioning them on this point will be addressed to the Fellows.

The report of the committee on finance, in the absence of Dr. Homans, chairman, was read by Dr. Wellington, and accepted.

The time and place of the next annual meeting were then recommended, namely, the second Wednesday in June, Boston. Accepted by vote.

Special committees were next called for. As chairman on the committee to notice the death of Drs. Jacob Bigelow and J. B. S. Jackson, Dr. Calvin Ellis read the following beautiful and impressive tribute:—

"When, at this our annual gathering, we call the roll and receive no response from Jacob Bigelow or John Barnard Swett Jackson, whose lives are a record of noble labor, we are reminded that the mere announcement of their names is a higher eulogy and a fuller expression of a sense of loss than any formal phrase of ours."

By vote the secretary was directed to enter these words upon the records of the society.

Dr. Davis then read a eulogy upon Dr. Comstock, of Middleboro', which, together with sympathetic remarks of Dr. Storer, it was voted to enter upon the records. A copy will also be sent to the family of the deceased.

The committee appointed in June, 1878, and to which was referred the resolution of the South Middlesex Society in reference to the admission of female practitioners to the Massachusetts Medical Society, then reported through Dr.

Hodgdon that, at the largest meeting of the committee, they were equally divided, and that therefore no decision had been reached.

Dr. Cogswell then said that since, only an hour before, Dr. H. W. Williams (whose absence was caused by the sad accident in his family) had expressed an earnest desire to present his views upon this question, he would move that the matter be recommitted to the committee for report at the October meeting of the councilors. The motion was affirmed.

Dr. Millet at once proposed an addition of four to the committee, in order to secure an opinion.

Dr. Driver, of the Middlesex Society, then stated that if delay were intended he wished to offer a protest.

Dr. Cogswell assured the councilors that his motion was dilatory, but was made out of respect for Dr. Williams, who wished to express his views upon this subject.

Dr. Cogswell's motion having already been voted upon in the affirmative, a vote upon Dr. Millet's proposition to increase the number of the committee was called for, and resulted in thirty-four ayes and forty odd noes.

Dr. Millet then moved that the committee submit the matter to legal opinion.

Dr. Hodgdon replied that the committee had already done so, and that legal opinion had influenced its action, and would be embodied in its report. The opinion was that the question of admission or non-admission of women to the society would legally be left to the judgment of the Fellows.

The result was that the whole subject was recommitted for report at the October meeting. Later in the evening, Dr. Driver, who originally presented the resolution from the Middlesex District, moved that the secretary be authorized to state in the circulars calling the October meeting that a report on the woman question would then be made, in order to secure a full meeting. The motion was affirmed.

The president then mentioned that it was necessary to find a new place of deposit for the records of the society. They are of great value, and cannot be replaced. For some years they have been kept by the Massachusetts Historical Society, which now desires their removal.

On motion of Dr. Bowles, it was voted that the treasurer be authorized to deposit these records temporarily in safe keeping until the councilors decide what to do with them.

On motion of Dr. Storer, it was voted that the treasurer be authorized to purchase at once a safe suitable for the protection of the records, and that the same be placed in the Medical Library Building. In order to procure funds for the same, subscriptions were suggested.

Dr. Millet then moved that the vote to distribute three fourths of the treasurer's balance to district societies be rescinded, and that the amount be devoted to the purchase of the safe. On assurance of Dr. Draper that this was unnecessary, the motion was withdrawn.

On motion of Dr. Goss, it was voted that the thanks of the society be presented to the Massachusetts Historical Society for kindness in protecting the records.

The treasurer then stated that among the funded property of the society were \$10,000 in ten-forty bonds, which have been called in and the interest

upon which will cease July 28th. He asked for authority to convert the same into four per cents. On vote of the councilors the authority was conferred.

Four ex-Fellows, Drs. Fairbanks, of Ashfield, Warren, of Spencer, Dean, of Taunton, and Hewbon, of Worcester, were next readmitted to the society by vote.

A note of regret at his absence from Dr. Henry I. Bowditch was then read; also a paper in which he offered the resolution that the treasurer be authorized to refund the amount paid to the society under legal pressure by Dr. Whiting, of Charlestown. Accompanying was a letter from Dr. Whiting, showing what he considers the injustice of the course pursued in his case. Referred to financial committee for report in October.

Dr. Streeter, of the Norfolk District, then presented the request of his society that it might be allowed to hold meetings out of their district. Reason: the great inconvenience to members in reaching the present place of meeting. He also presented a lengthy memorial, the reading of which, inasmuch as every gentleman present had received a printed copy at the door, was superfluous. Much discussion ensued, during which the law passed June 12, 1877, namely, "that a district society cannot legally hold an organized meeting for any purpose whatever at any other than some place within the limits of its own district," was rescinded. Finally, Dr. Cogswell moved that the whole matter be indefinitely postponed, the object of this motion being to leave the question to the judgment of the Norfolk District, and thus avoid establishing a precedent for other district societies. Dr. Bowles then moved that Dr. Cogswell's motion be modified to a motion that the subject be postponed to the October meeting. Councillors voted no to this, and aye to Dr. Cogswell's motion.

ANNUAL MEETING.

At nine o'clock on Wednesday morning, the annual meeting of the general society was called to order in Horticultural Hall by the president.

The secretary and treasurer read their reports, details of which have already been given.

The report of the committee on the revision of the United States Pharmacopœia being called for, Dr. Amory, chairman, read the same, concluding with six recommendations, the purport of which is as follows: (1.) That three delegates be sent to the pharmacopœial convention, and that the society recommend to the convention the adoption of the metric system of weights and measures in addition to that now in use, in directions for making preparations and in statement of doses.

(2.) That the society be of opinion that the next edition would be more valuable if more information be added concerning botany, chemistry, therapeutic and physiological effects, antidotes, and *average* doses of drugs included in the list.

(3.) That the material accumulated by the committee in favor of or against drugs be placed in the hands of delegates to be appointed.

(4.) That an annual supplement be prepared after publication of the decennial revision.

(5.) In order to increase its value, that the decennial revision be prepared

by the best talent, said talent to be secured by proceeds from a proposed fixed copyright interest in the sale of the work.

(6.) Finally, that this report, and the material collected, be presented to the next pharmacopeial convention.

The recommendations were accepted, and three delegates, Drs. R. Amory, R. S. Edes, and E. S. Wood, appointed by the chair.

An excellent essay on The Trials and Triumphs of the Country Physician was then read by Dr. B. D. Gifford, of South Chatham, followed by interesting papers on Insane Drunkards, by Dr. T. W. Fisher, and on Some Diseases of the Eye requiring Immediate Treatment, by Dr. C. H. Williams, both of Boston. Delegates from state societies, namely, Dr. Wainwright, of the Connecticut State Society, Dr. Sawyer, New York State Society, Drs. Crosby and Cook, of the New Hampshire Society, were introduced, and presented greetings from their respective bodies.

Dr. Marcy, of Cambridge, then exhibited a remarkable case of aneurismal varix.

At twelve o'clock Dr. George W. Garland, of Lawrence, delivered a well-received annual discourse, after which the Fellows proceeded to the tables in Music Hall.

ANNUAL DINNER.

At one o'clock the anniversary chairman, Dr. C. C. Holmes, called the society to order. In the enforced absence of the Rev. Phillips Brooks, chaplain of the society, prayer was offered by the Rev. William Lawrence.

The bountiful and toothsome repast next received earnest attention, and it may be said that the cold lunch proved far more satisfactory than the somewhat uninviting lukewarm dishes heretofore provided.

At two o'clock the Fellows were again called to order by Dr. Holmes, who in an effective manner offered his congratulations upon the return of the day, and said that although the past year contained no great discovery or startling invention the society could not help seeing substantial progress based upon advancing knowledge. Gentlemen, the road is open before us. No entangling alliances. With the tremendous power of good in our hands let us perpetuate as we can our claim upon the respect and gratitude of men. Dr. Holmes then felicitously called upon President Dr. Lyman to respond for the Massachusetts Medical Society.

Dr. Lyman responded in the following well-chosen words:—

"Mr. Chairman, — The presidency of this venerable society, with all its honors, has, like all good things, some disagreeable elements, not the least of which is the necessity which it imposes of replying to an after-dinner toast. If the sentiment of the chairman had only contained the germ of an idea, — a little suggestion of something to talk about, — it would have been a friendly act; but to tell a modest man that he is that nondescript creature, a good fellow, is rather awkward, and not debatable. I must fain content myself, therefore, with assuring you '*officially*,' if there be any who have any doubt in the matter, that the society was never so flourishing, never so free from the bitterness of past controversy, or from anxiety as to any future pitfalls which may be in our path. There is a growing prevalence of late years of a different method

of handling vexed questions. If we have learned nothing else, we have learned to agree to disagree; we have learned that a quickened pulse under temporary excitement is better treated by sedatives than by irritants, and that earnest opinions, earnestly but courteously expressed, are of much more favorable augury than lethargic indifference. We have learned something of the true value and meaning of our charter, and that no vital change can or ought to be carried as against an unconvinced majority, any more than it can be prevented by an unwilling and obstinate minority. There are subjects in which as a society we are all deeply interested, but it would be in bad taste to specify them here, for our object now is relaxation, not discussion, the renewal of friendly acquaintance, not the indulgence of professional differences.

"A continuance of our prosperity depends on ourselves. We are all surely seeking one end, and one only, and that is the maintenance of our influence as a profession in the community in which we live upon all questions which legitimately belong to us, and upon which they have a right to look to us for guidance. A careful, courteous consideration, in a broad and catholic spirit, of such propositions, with the single desire of arriving at the truth, is the only safe course on which to base either the adoption or rejection of any measure. He who is convinced against his will will prove eventually to be more unconvinced than ever. Let us, then, follow in all things that great unwritten code of ethics which demands of each member that he shall be a *gentleman*, for that is a code which cannot be evaded. This society ought to be looked up to as the highest tribunal, the supreme medical court, for the decision of all questions which relate to the health and the morals of the community, as is our supreme judicial court the ultimate arbiter in questions which involve their wealth and morals. This would be no encroachment upon the functions of our reverend friends the clergy, for I am sure that neither the doctors of law nor the doctors of medicine would ever feel equal to their work were their efforts not based first, last, and all the time upon that sure foundation which it is the privilege and duty of the doctors of divinity to demonstrate to us."

Dr. G. W. Garland then briefly responded to a sentiment to the orator of the day.

Collector Beard replied to a toast to the president of the United States by saying that if he were to respond officially for the president he should say that he needed neither defense nor eulogy, for he has shown himself master of the situation. He closed with pleasant boyhood reminiscences of the family doctor.

"The State of Massachusetts" brought a response from Lieutenant-Governor Long, who expressed his regret at the unavoidable absence of Governor Talbot, and then, in one of the most eloquent speeches of the occasion, he expressed his recognition of the services of members of the medical profession in the halls of legislation and in the executive councils of the State; of the excellent effect of the establishment of the medical examiner system; of the great and increasing good accomplished by the board of health; and closed with a tribute to the profession in general, making graceful and affecting allusion to the character of Surgeon-General Dale.

Mayor Prince then responded for the City of Boston in words of congratulation upon the high position of the society, and with humorous reference to the effect upon patients of the vacation of their physicians.

President Elliot was called upon to respond to a toast to Harvard University. He said it gave the representatives of the university great pleasure to extend its greeting to this the strongest professional body in the country, and then entered upon a very humorous delineation of a disease peculiar to Harvard students. For symptoms of the same we must refer our readers to the reports published in the daily papers.

Dr. D. Humphrey Storer was called upon to speak in memory of the dead. His sententious and eloquent eulogies framed such striking portraits that only the few failed to recognize Jacob Bigelow, J. B. S. Jackson, and W. W. Comstock.

The chairman alluded to the absence of Dr. Bowditch, regretting the cause of his detention. Dr. Amory then read an earnest and characteristic letter of greeting from Dr. Bowditch, after which Dr. Wainwright responded happily for the Connecticut State Medical Society.

Surgeon Head responded for the United States army in interesting reminiscence.

Assistant Surgeon Stevenson briefly replied to a toast to the United States navy.

Dr. Alfred Hosmer, president of the Medico-Legal Society, made a fine response to a toast touching upon the marriage of law and medicine.

Dr. Millet, of Bridgewater, briefly responded to a sentiment to the medical profession.

We regret that space does not allow us to include the very pertinent and happy toasts of Dr. Holmes, who, though a veteran toast-master, never excelled his record of this occasion.

About six hundred and fifty gentlemen were at the tables, of whom, with but five exceptions, all were physicians.

The exercises were interspersed with excellent music by the Germania orchestra; everything passed off satisfactorily, and this successful annual meeting will only increase anticipations of the pleasure of future meetings of the Massachusetts Medical Society.

PROCEEDINGS OF THE CONNECTICUT RIVER VALLEY MEDICAL ASSOCIATION.

A. P. RICHARDSON M. D., CORRESPONDING SECRETARY, WALPOLE, N. H.

MAY 7, 1879. The annual meeting was held at Towne's hotel, Bellows Falls, Vt. Thirty members were present, Dr. Brooks, of Charlestown, N. H., in the chair.

Epidemic Diseases. — This was the subject of the president's address, having particular reference to the comparative frequency and violence in the Connecticut River Valley and the region extending on either side. It was shown by Gallup's history and by the testimony of old practitioners, as well as by observation, that epidemic diseases have been much more prevalent and severe on the hills than in the valleys. The speaker was inclined to the belief that the cause was largely due to meteorological changes, there being two or more degrees' difference in the isothermal lines included in these regions. As this difference causes marked changes in the flora, it must produce a like effect

upon health and disease. As epidemic diseases are more severe on the hills than in the valley, the conclusion was reached that the former are near or at the centre of the disease realm, while the latter is on its border.

Discovery of Anæsthetics. — Dr. Loveland read a paper on the history of the discovery of anæsthetics, awarding the discovery to Horace Wells, who was born in Windsor, Vt., in 1815. He studied dentistry, and was located in Hartford, Conn., at the time he discovered the anæsthetic property of nitrous oxide gas, December 11, 1844. Dr. Riggs administered the gas to Dr. Wells at this time and extracted a molar tooth. Dr. Wells devoted all his faculties to the details of his discovery, and published the results. His desire to benefit mankind overcame all pecuniary considerations. In January, 1845, Dr. Wells, in connection with his friend, Dr. Marcy, discovered the anæsthetic property of the agent generally used, namely, *sulphuric ether*. Dr. W. G. T. Morton, a former student of Dr. Wells, who is named in works of high authority as the discoverer, did not use any anæsthetic agent till September 30, 1846. Some of the statements contained in the paper were novel to many present, but the reader claimed that they rested on a solid foundation, he *being acquainted with the mother and sister of Dr. Wells, from whom he had obtained some of the above facts.*¹ — Dr. Allen, of White River Junction, Vt., remarked that Horace Wells deserved the honor of discovering the use of anæsthetics. — Dr. Frost said Boston was ready to take the honor, but it belonged to Wells. — Dr. Phelps remarked that while attending medical lectures at Burlington, Vt., in 1822, the idea prevailed in the class that by inhaling sulphuric ether from a saucer through a tunnel one could have a tooth extracted without pain. He did not know that any teeth were extracted under its influence.

Carcinoma of Rectum; Lumbo-Colotomy. — Dr. G. W. Hunt, of Cornish Flat, N. H., by request reported the following case: A farmer, forty-seven years old, was having five or six discharges from the bowels daily, sometimes accompanied with blood and mucus, with very little pain. Patient said that eighteen months before he had a slight attack of dysentery; but did not have medical treatment. Since then his bowels had been slightly irregular, but he had no trouble sufficient to hinder him from active work. Had general appearance of health, digestion good, was working as usual, but supposed he was suffering from piles. Rectal examination revealed a hard mass, three inches from sphincter muscle, filling the rectum so that it would not admit a gum catheter. Carcinoma was diagnosticated. A week later all movements from the bowels had stopped. On consultation with Drs. Phelps and Frost an operation was recommended. Dr. C. K. Briddon, of New York, was summoned by telegraph, and performed the operation as follows: The patient was etherized, and placed with face downwards, and a pillow under the abdomen. An incision five or six inches in length was made upon the left side, between the crest of the ileum and the lower rib, and midway between the crest of the ileum and the posterior processes of the third and fourth lumbar vertebræ, down by the outer side of the quadratus lumborum muscle, by a careful dissection, till the colon was revealed. The bowel was inflated through a tube in the rectum, so as to bulge somewhat into the wound, and was then transfixed by two strong lig-

¹ The italics are ours, as we have not space to inflict again upon our readers a statement of the facts. — ED.

tures, one and one half inches apart, carried deep through the lips of the wound, when a transverse incision was made one and one half inches long, not quite half severing the intestine. The ligatures were hooked up through the cut in the bowel and divided, thus making four sutures. A few small sutures were added between the large ones, and the artificial anus established by fine sutures around the cut of the bowel. The colon immediately discharged faeces freely, the patient rallied well, the wound healed rapidly, and the man, five months after the operation, is in comfortable health, looking after his business. He has two or three evacuations daily, with a few minutes' warning of the same. The tumor has not made rapid progress since the operation, and the patient's lease of life seems much extended.

Dr. Frost presented a model of the brain now in possession of Dartmouth College, and gave a review of the anatomy of the head; exhibited also a diagrammatic representation of the function of the brain, and gave an interesting and scholarly explanation of the same.

Epithelial Cancer; Specimen. — Dr. Rugg, of Hartland, Vt., presented specimen of cancerous uterus. The disease had run the usual course.

SUMMERS ON YELLOW FEVER.¹

THIS little work, which is dedicated to three of the author's former students and colaboreers who lost their lives in the great epidemic last summer, gives in a lucid, logical, and practical manner the writer's views, drawn from experience on the various points at issue regarding yellow fever. *Ætiologically*, he considers it a zymotic disease, not necessarily dependent upon a *specific* germ; always ushered in in any locality by a train of intensified malarial influences, which gradually glide into the specific fever; depending for its development upon atmospheric relations of heat and moisture which are favorable to sporulation of the infectious germs; not contagious but infectious, and liable to spring up at any time in Southern latitudes *indigenously*, whenever the atmospheric conditions favor. This is in opposition to the more popular opinion which has been usually promulgated in our Southern States. The author bases his opinion on the preexisting aggravation in the type of the malarial fever, which he states always ushers in the specific yellow fever, and upon the fact of its occurrence during the last epidemic in many small, isolated places, "where there was no possible chance for the importation of the disease without knowledge on the part of the inhabitants. . . . The issues have been so fearful," he says, "that it is no longer expedient, nor possible, indeed, to waive the investigation of their origin. We have already too long hugged the delusive phantom of quarantine, which is as inhuman as it is unscientific and impracticable."

In these matters he is in accord with an increasing number of experienced physicians in the South, who believe that yellow fever is now indigenous; that for its development both "seed and soil" are requisite; that in many places, for instance, Huntsville, Ala., Atlanta, Ga., and Nashville, Tenn., the soil

¹ *Yellow Fever.* By THOMAS O. SUMMERS, M. D., Professor of Anatomy and Histology in the University of Nashville and Vanderbilt University. Wheeler Bros. Nashville, Tenn. 1879.

does not exist, as has been shown by exposure to frequent epidemics; and that when both these factors are present quarantine is of no avail. On the other hand, last summer, in Galveston, Texas, where strict quarantine, carried to the extent of non-intercourse with infected districts, prevailed, there was not a case of yellow fever, although in all former epidemics for thirty years whenever yellow fever has broken out at New Orleans it has soon after attacked Galveston, transferred presumably by vessels.

Although Dr. Summers presents his convictions on these points in strong terms, there are still many doubtful questions regarding the origin, cause, and mode of propagation of yellow fever, in answer to which it may be said that we derive little assistance from the hasty and *ex parte* report of the United States Yellow Fever Commission presented last autumn. The necessity for the greatest vigilance in sanitary measures is the one thing upon which all agree.

The author had good opportunities for post-mortem examinations at the city hospital in Memphis. The pathological appearances noticed were briefly as follows: Extraordinary fluidity of the blood; great hypertrophy and softness of the spleen, which in four instances was found to be eight inches long and five inches broad; signs of entire cessation of function in the liver; albuminous and bilirubine infarctions in the tubules and pelves of the kidneys, causing mechanical obstruction; not the slightest pathological change in the gastric walls, although twenty-eight cases presenting the greatest clinical divergence were selected. In some cases of violent black vomit the stomach was examined five minutes after death. A greenish, stringy substance, consisting of degenerated liver substance, blood corpuscles, and mucus, was found in many cases extending from the dilated gall-bladder through the bile duct and duodenum to the stomach, which was in some instances filled with a material of similar appearance, and giving the reaction for biliary coloring matter. This the author believed to be the black vomit, the excrementitious matters of bile which exude when the liver is not secreting, mixed with the fluids of the stomach and altered blood in certain cases. The yellowness of the skin was often absent, but usually a dusky violet-bluish color was observed, which later became yellow in many instances. The yellow color of the internal organs was attributed to biliverdine. The author is of the opinion that the cerebro-spinal system is primarily involved in yellow fever, and that the chief pathological fact is the entire suspension of secretion.

Clinically there is little that is new. Out of four hundred and eighty-two cases the author records two hundred and thirty-seven deaths preceded by black vomit, and thirty-nine recoveries after the occurrence of black vomit, which in some cases was copious. Most of the fatal cases were characterized by suppression of urine.

During the initial rigor a hot bath, the application of mustard to the spine and a dose of castor-oil are recommended. When the fever develops (104° - 110° F.) the free use of ice externally and internally, cold spongings, etc., are necessary. The wet pack was useful. The author says, "Water is the remedy in yellow fever," but regrets the prejudices and want of courage which interfere with the application of so rational a method for lowering the temperature.

TYPHOID FEVER IN MELBOURNE.¹

THE author finds that typhoid fever first appeared in Victoria in 1842, when it was imported by passengers from an immigrant ship, on board which the disease had prevailed, and that it has since been repeatedly introduced in the same way. He states that genuine typhoid fever is the ordinary fatal fever of Victoria, where it tends to increase in severity, and is more fatal in proportion to population than in England. The author is also quite satisfied that typhoid fever is strictly and highly contagious, and that no proper effort has been made to destroy the contagion. The tendency on the part of many writers at present is to attribute to contagion a greater share of the prevalence of typhoid fever than has previously been accepted, and we believe with good reason. Unquestionably much greater care should be exercised in the disposal and disinfection of excreta, an object not likely to be gained as long as the disease is regarded as one of slight communicability.

ROCKWELL ON ELECTRICITY.²

THIS little book, as its name does not imply, cannot be said to give an unbiased discussion of the place of electricity in therapeutics. As a special plea it is, however, useful, as calling attention to this important subject, and especially to the value of the so-called "general faradization" and "central galvanization," with which the name of the author has long been associated.

Perhaps this is all that was intended, but then it would have been far better to have omitted the "compendious text-book" chapters, at once tedious and too brief, and to have remodeled the original parts into a printed essay.

WOOD'S LIBRARY OF STANDARD AUTHORS.³

THE LIVER.

THE last three volumes of this series, that of diseases of the liver, by Freerichs, the celebrated professor of clinical medicine in the University of Berlin. The work was translated into English by no less a person than the late Dr. Charles Murchison. Two such names are rarely to be found together as guarantee of the excellence of a book. Former editions of this work have already been reviewed in these pages; we will merely say here that the "library" form in no way impairs the value of it. In each volume there is a

¹ *Typhoid Fever in Melbourne: Its Cause and Extent.* Based on the Report of an Inquiry made by Special Request of the Central Board of Health, etc. By WILLIAM THOMSON, F. R. C. S. Third edition revised, with Remarks on a Review of the Report. George Robertson, Melbourne, Sydney, and Adelaide. 1879.

² *Lectures on Electricity in its Relations to Medicine and Surgery.* By A. D. ROCKWELL, M. D. New York: Wm. Wood & Co. Pp. 99.

³ *A Clinical Treatise on Diseases of the Liver.* By DR. FRIED. THEOD. FREERICHS. In three volumes. Vol. III. Translated by CHARLES MURCHISON, M. D., F. R. C. P. New York: William Wood & Co. 1879.

handsome frontispiece, and the text is liberally illustrated by wood-cuts. It is one of those treatises on especial subjects which practitioners would do well to study with care. They cannot afford to plead the excuse of want of time. The liver has long enough been blamed for most of the ills to which we are heirs, a target for map diagnoses and hap-hazard treatment. With such instruction as these volumes give, patients have at least the right to claim from their doctors a knowledge of the views of the standard writers of the day. The very cheap rate at which these volumes are disposed of to the subscribers is a significant fact, and we trust the experiment now being made will convince publishers that cheap medical literature of the right sort will "pay" as well as forms, we fear, perhaps more familiar to the trade.

THE SANITARY ASSOCIATION OF LYNN.

THE excellent results from the voluntary sanitary societies in Edinburgh and Tottenham have suggested the value of similar organizations elsewhere, and already Newport and Lynn in this country have followed their example. The Lynn association has just published a small pamphlet containing their rules, etc., in which one may readily recognize the work of a skillful and practiced sanitarian; and it might well serve as a model for similar societies which we hope will spring up throughout the country.

The objects of the association are (1) to promote a general interest in sanitary science, and to diffuse among the people a knowledge of the means of preventing disease; (2) to secure the adoption by the city authorities of the most effectual methods of improving the sanitary condition of the city; (3) to provide its members at moderate cost with such skilled inspection as shall secure the proper sanitary condition of their premises and those of other people in whom they may be interested. Any citizen of Lynn may become a member by paying an annual assessment of five dollars. He is entitled to vote at all meetings; to an annual inspection and report upon his premises by a competent person; to occasional supplementary inspection and advice, in case of an epidemic or undue prevalence of disease; to inspection of other buildings than his dwelling upon terms agreed upon by the executive council. There are working committees on diffusion of sanitary knowledge, on the sanitary condition of the city, and on inspection of buildings. Public meetings, lectures, articles for the press, tracts for distribution, investigations, coöperation with the municipal authorities, etc., are provided for. From the names of their officers, and from the quiet, straightforward statement of their plans, we predict for the Lynn Sanitary Association a future of great usefulness. Every city and town in the State should follow their example.

MEDICAL NOTES.

— We print this week another letter from Dr. Bigelow on the subject of litholapaxy, in which he criticises some remarks of Sir Henry Thompson on that operation, which appeared in the *New York Medical Record*.

NEW YORK.

— One of our principal surgeons, Dr. John Thomson Darby, has just died in the prime of life, although after a long and painful illness. He was born at Pond Bluff Plantation, St. Matthew's Parish, South Carolina, in December, 1836, and was consequently in his forty-third year. He pursued his medical studies at the medical department of the University of Pennsylvania, where he passed an unusually brilliant examination, and received his degree in 1858. He then became assistant to Dr. Joseph Leidy, the distinguished professor of anatomy in his *alma mater*, and remained in Philadelphia till the outbreak of the late war, when he returned to South Carolina, and entered the Confederate service as a surgeon. He was at one time on Gen. Robert E. Lee's staff, and also held, during a considerable period, the position of chief medical and surgical director in the commands of the armies of Virginia and Tennessee. After the close of the war he went abroad to study in England and on the Continent, and during the German war of 1866 served as a volunteer surgeon in the Prussian army.

On returning to America he was appointed professor of surgery in the Charleston Medical School, and retained the position until 1873, when he received an election to the chair of surgery in the medical department of the University of the City of New York, made vacant by the resignation of Prof. Alfred C. Post, and removed to this city. In time he was also appointed surgeon to Bellevue and the Mount Sinai hospitals. Ever since the civil war it is stated that he has suffered more or less from the results of a poisoned wound, and during the last two courses of winter lectures his health was such as to interfere seriously with the performance of his duties at the university. Consequently this spring he resigned his chair, and was elected professor emeritus.

Dr. Darby's wife was a niece of Gen. Wade Hampton, who was present at his funeral, and he leaves four children. He was esteemed no less as an accomplished gentleman than as a skillful surgeon, and he had won hosts of warm friends in his adopted city by his genial manners and high-toned character. In addition to various contributions to periodical medical literature, he was the author of *Campaign Notes on the German War of 1866*. He suffered from malarial trouble, with marked enlargement of the liver, besides his other complaint, and had been confined to the house since the early part of February last. The funeral services, prior to the removal of the remains to Columbia, S. C., for interment, were held at St. Ignatius Church on the 10th of June, and were attended by a large number of prominent medical men (besides other friends), including almost the entire faculty of the medical department of the university.

— We are informed that although there are at present no female students in the medical department of Syracuse University, this failure of an attempt at coeducation of the sexes, the faculty believe, is not to be attributed to any evil moral results, as a passage in our editorial of June 5th might possibly have led a hasty reader to infer.

— Small-pox continues to spread to a slight extent among the Bohemians, among whom the recent cases of it occurred, and who, as a rule, are not properly vaccinated. The objection made by them to vaccination is mainly in

consequence of superstition, and the health authorities have applied to the minister of the Bohemian chapel in Fourth Street to give a little common-sense advice on the subject to his congregation, with the hope of overcoming this prejudice. Last week six cases of small-pox were reported to the board of health, but since the beginning of the present week as many as five cases have been reported on a single day.

Scarlet fever still continues quite prevalent for this season of the year, one hundred and one cases having been reported during the week ending June 7th.

— On the first Saturday in June the first of the Poor Children's Summer Excursions took place, the party consisting of three hundred children from the German quarter of the city, who were taken to the summer home of the Children's Aid Society, at Bath, Long Island. On the following Monday one hundred and thirty children from the industrial schools of the society were sent down to remain for a week, and enjoy the benefit of the fresh air, the sea bathing, and good country fare that is there provided for them. Seventy quarts of milk a day are supplied by cows kept on the premises.

— A warning to many of the fair sex ought to be found in the announcement that a certificate of death from peritonitis in the case of a young woman who swallowed a pin eight months ago was recently received at the coroner's office.

ST. LOUIS.

— Entertainments in the way of a fair, an amateur opera, and an opera bouffe have recently been given here for the benefit of three hospitals,— the Mullanphy (Catholic), St. Luke's (Episcopalian), and the Woman's (non-sectarian) hospitals,— by which between twenty-eight and thirty thousand dollars were raised. Over twenty-six thousand of this went to the Mullanphy Hospital.

— A few days ago, at the City Hospital, upon post mortem, an aneurism was found in the kidney. The sac of the aneurism had ruptured, and the escaped blood had distended the capsule of the kidney till it was some eight inches long and between two and three inches wide. The aneurism itself was about the size of a pigeon egg.

At the same institution there is a case of hypospadias, the urethra opening just as it emerges from the scrotum. One testicle is very much atrophied; the other was injured, and removed some four years ago. The patient is forty-eight, and has never known sexual desire.

CORRESPONDENCE.

LITHOLAPAXY.—DR. BIGELOW TO THE EDITOR OF THE NEW YORK MEDICAL RECORD.

TO THE EDITOR OF THE NEW YORK MEDICAL RECORD,—An editorial paragraph in the *Record* of May 31st mentions that the letter from Sir Henry Thompson to Professor Van Buren, which appeared in the previous issue, was written for publication.

Sir Henry's reiterated criticisms of lithotrites should not be allowed to ob-

sure the main facts, be their value more or less, of rapid lithotripsy, which means long sittings for the immediate and complete evacuation of the fragments by large tubes, and depends upon the newly-discovered tolerance of the bladder to the smooth surfaces of instruments, while the old lithotripsy meant repeated short sittings and sharp fragments left in the bladder.

The size of a lithotrite has little to do with litholapaxy. Stones are so frequently soft and small that a small lithotrite of any kind may be often large enough. Of course the operator will be careful not to break such a lithotrite upon a large or hard stone. Like other lithotrites, mine is made in various sizes. It is not a large lithotrite that I have desired to bring to the attention of surgeons, but a new lock, with protective and non-impacting blades, designed to promote safe and rapid work at a moment when the hand or the attention of the operator is fatigued by a long operation. I prefer a large lithotrite, if it possesses these qualities, even in dealing with common calculi. Sir Henry prefers a smaller one, whether it clogs or not, and frequently withdraws it to clean it. His prejudice against a large instrument is connected with a life-long and erroneous theory that the dangers of lithotripsy result mainly from the instruments used in the operation. This was the general mistake of the day. It was not known that the irritation was really occasioned by the fragments which it was the custom to leave in the bladder. When these fragments were drawn out by my apparatus, and that source of danger to the bladder was removed, it was found that the instruments themselves did but little harm. Sir Henry, perhaps, might long ago have discovered this fact of the tolerance of the bladder to instrumentation, if he had possessed any means of evacuating it thoroughly. But he had only Clover's instrument, the tube of which was so small (21 French) that it drew out only sand, and left the fragments. Hence his error and failure to discover the new facts of what is now known as rapid lithotripsy.

Sir Henry devotes the last half of his letter to the expression of creditable sentiments in relation to his attitude towards surgical progress. A little explanation may be here desirable.

A year after the publication of my paper, he published a lecture in the *Lancet* (February 1, 1879), in which he says, "My own system has for a long time past been gradually inclining to the practice of crushing more calculus at a sitting, and removing more débris by the aspirator, than I formerly did,"—which might very well be true, his former sittings having been limited to two minutes or less; but the hindrance to his "removing more débris" was the small size of Clover's tube. The editor of the *Lancet* replied (February 15th), "We cannot close our eyes to the fact that the views advanced in his lecture of the 1st inst. do involve an abandonment of his old position. Lithotripsy as hitherto practised by him, and lithotripsy as recommended and performed by Professor Bigelow, are different operations, and based on opposite and contradictory principles." This "editorial observation" in the *Lancet* Sir Henry, curiously enough, chooses to regard, in his letter published in the *Record*, as "adverse criticism of himself personally, not of his mode of operating."

In this connection Sir Henry expresses the opinion that the terms "abandonment of position," and the like, "adapted as they are to military men," do

not accord with the aims of men who "live and learn." . . . It is an error," he says, "to look for a life-long consistency in matters of opinion from men who think for themselves." The world will not question the right of Sir Henry to "live and learn," nor to "think for himself," but only the propriety of his claiming to have originated by "thinking for himself" ideas he has learned from others.

A friend has to-day sent me the fifth edition, just published, of Sir Henry's Diseases of the Urinary Organs. I find that in this edition Sir Henry both honors rapid lithotripsy with his indorsement, and appropriates as his own its essential details.

He adopts large tubes, increasing the ineffectual catheter of Clover from 21 to 29, which latter calibre I often employ, my smallest tube being 27, my usual size 30, and the largest 31. "You are first to introduce," he says (page 173), "an evacuating silver catheter fitted with a flexible stylet,—in size, say, from No. 14 to No. 16, English scale," calibres equivalent to 24 and 29 French.¹ Here being the essential feature of the operation, Sir Henry at this point definitively abandons "consistency" and the 21 tube of his previous editions in favor of "large evacuating catheters and a good aspirator" (page 177). Neither of these he used before I described them. This gives him the whole key to rapid lithotripsy, and he is able to accomplish thorough evacuation at once by prolonging the sitting till evacuation is complete, demonstrating at the same time that the bladder tolerates instrumentation if the fragments are removed,—which is the new principle that underlies litholapaxy. The large tube once appropriated, the rest is easy. The aspiration of his new edition means effectual aspiration with large tubes, and his lithotripsy becomes rapid lithotripsy.

A comparison of this, Sir Henry's present practice, with his recent opposite teaching of frequently repeated crushings—each confined to a few minutes, lest the polished instrument injure the bladder, but leaving the bladder nevertheless to struggle, in the intervals, with sharp, broken pieces of stone, which he had no means of extracting,—will show the significance of the criticism by the editor of the *Lancet*.²

In conclusion, I may venture to hope that the valuable example set by Sir Henry in accepting large tubes will aid in doing away with whatever apprehension still exists of danger from their use.

HENRY J. BIGELOW.

¹ Handerson's comparative scale, from which these equivalent numbers are taken, is made by Reynders & Co., New York. It is accurate, and very convenient in having, instead of holes, a long triangular slit like a wire gauge. "In England," says Sir Henry Thompson, "we cannot be said to have a uniform scale; all our measurements are very arbitrary. One maker has one scale, and another another." (Diseases of the Urinary Organs, 1879, page 47.) On page 48, however, he gives a scale, of which the largest size, 14, is the equivalent of 24, and this corresponds to Handerson's scale. (New York Medical Record, 1877, page 638.) The French numbers increase more rapidly than the English. Larger calibres have hitherto been but little known either in France or England. The main point is the necessity of enlarging Clover's tube.

² The Lancet of May 17th contains a letter on this subject.

SHORT COMMUNICATIONS.

IN-GROWN TOE NAIL.

MR. EDITOR.—The late eminent surgeon, L. L. Miller (of Providence), for very many years ablated the redundant flesh and a strip of the nail with a carpenter's gouge, at a blow. This mode he used prior to the use of ether; with ether he may have performed it with a scalpel.

JAMES O. WHITNEY.

PAWTUCKET, R. I.

A CASE OF "EAR COUGH."

BY WILLIAM S. BOWEN, M. D., PROVIDENCE, R. I.

ALTHOUGH many cases of the peculiar reflex cough from irritation of the external auditory canals have been reported by various authorities, such as Tissot, Pechlin, and Fox, of Scarborough, since the first published case of Fabricius Hildanus in 1596, it is undoubtedly true that many cases exist and go unrelied in which medical treatment directed solely to the respiratory organs and the throat utterly fails to be of use. A case of dry, harsh cough of the type usually called "nervous," when a thorough physical examination of the lungs and of the larynx does not reveal an exciting cause, should be viewed with suspicion, and the external auditory canals should also be carefully inspected, and thus exclude, if possible, the reflex action above mentioned.

An excellent illustration of the necessity for this examination recently came under the observation of the writer.

A girl, aged eight, had been the subject of a dry and at times very distressing cough for nearly two years and a half, and had been under medical treatment, including electricity, during the whole of that time. Her general health was good, and she was unusually large and strong for her years. The fauces were free from disease, and a rhinoscopic and laryngoscopic examination showed an absolutely healthy condition of the parts from the dome of the pharynx to the bifurcation of the trachea. The right external auditory canal was filled with inspissated cerumen, and on removal a large jet bead was found impacted in the cylinder of wax. It had laid in contact with the floor of the canal, about two millimetres from the membrana tympani, and had caused considerable ulceration of the dermoid layer. The cough entirely disappeared in about ten days. The child would not acknowledge having placed the bead in her ear, but her friends remembered that she had such beads to play with while visiting relatives two years and a half before. The reflex action is through a branch of the auriculo-temporal branch of the fifth pair, and the connection takes place in the floor of the fourth ventricle of the brain.

FRANK F. MAURY.

DR. FRANK F. MAURY died in Philadelphia, on the 4th of June, at the age of thirty-nine. His wife died suddenly about a fortnight previous under peculiarly painful circumstances, while Dr. Maury was away from the city. Immediately on his return he was taken sick with pulmonary congestion, with the result as stated. They leave two children. He studied medicine at the University of Virginia and Jefferson College, and after graduation became assistant to Professor Gross, and was for a long time his chief of clinic. As a surgeon he had already given evidence of marked ability, and had attained a prominent position through his application to his profession and his skill as an operator. At the time of his death he was surgeon to the Philadelphia Hospital, and to the Jefferson College Hospital, and held a lectureship in the summer course at Jefferson College. He was at one time coroner's physician, but was obliged to resign this position on account of his large practice. He took a warm interest in Jefferson, and it was largely due to his efforts that the plans for erecting

the new hospital and equipping it for service were carried to a successful issue. Dr. Maury gave promise of attaining a very high position among American surgeons. He was associated with Dr. Duhring as editor of the *Photographic Review of Medicine and Surgery* a few years ago, but had contributed very little personally to the literature of his profession beyond occasional articles in the journals. He had an extended experience, and performed a number of capital operations, including the ligation of the innominate artery, gastrotomy for stricture of the oesophagus, and others of equal importance. He also had a series of cases of extrophy of the bladder, in which he obtained good results by a plastic operation, part of which was peculiar to himself. In social life he had charming manners, perfect address, and an air of warmth and candor that made him a host of friends; he was always light-hearted and impulsive, and if his sanguine temperament sometimes led him to promise more than he could possibly perform he was always sincere in his desire to oblige his friends. As a lecturer he was positive in his teaching and clear in his explanations, and his courtesy to his patients and the students made him a general favorite. In his clinics at the Philadelphia Hospital he more than once publicly reprimanded the attendants for rough treatment of patients, and turning to the class said, "Gentlemen, it should not make the slightest difference to you whether your patient is rich or poor; a sick person deserves all the consideration and kindness that you can possibly give him, and if poor he needs it all the more."

His mistakes were those of the head rather than of the heart, but unfortunately they were such as society generally makes the most of; he was generous, loved company, and cordially hated meanness. What he might have been those who knew him in life can now only conjecture; what he was he owed solely to his perseverance, industry, and manly self-dependence.

REPORTED MORTALITY FOR THE WEEK ENDING JUNE 7, 1879.

| Cities. | Population estimated for July, 1879. | Reported Deaths in each. | Annual Death-Rate per 1000 during the Week. | Percentage of total Deaths from | | | | |
|----------------------|--------------------------------------|--------------------------|---|---------------------------------|------------|----------------------|-----------------------|----------------|
| | | | | The Principal Zymotic Diseases. | Pneumonia. | Diarrhoeal Diseases. | Diphtheria and Croup. | Scarlet Fever. |
| New York | 1,085,000 | 490 | 23.55 | 18.37 | 7.55 | 3.47 | 8.06 | 6.38 |
| Philadelphia | — | 274 | — | 11.31 | 8.65 | 4.74 | 2.19 | 8.21 |
| Brooklyn | 564,400 | 171 | 15.79 | 21.06 | 7.02 | 5.28 | 5.85 | 4.68 |
| Chicago | — | 108 | — | 14.81 | 9.26 | — | 7.41 | 2.78 |
| St. Louis | — | 132 | — | 18.18 | 2.27 | 12.12 | .76 | .76 |
| Baltimore | 365,000 | 125 | 17.85 | 19.20 | 2.80 | 8.00 | 4.80 | 1.60 |
| Boston | 360,000 | 188 | 19.26 | 12.75 | 6.77 | 5.26 | 3.76 | .75 |
| New Orleans | — | 88 | — | 12.50 | 8.41 | 10.23 | 2.27 | — |
| Cincinnati | — | 84 | — | 26.19 | 5.06 | 2.88 | 3.67 | 14.28 |
| District of Columbia | 160,000 | 85 | 27.69 | 27.06 | 3.53 | 18.82 | 2.35 | 3.63 |
| Cleveland | — | 41 | — | 9.76 | 14.63 | 2.44 | — | 4.88 |
| Pittsburgh | — | 39 | — | 17.44 | 10.26 | 2.66 | 5.13 | 5.13 |
| Buffalo | — | 30 | — | 63.33 | 3.33 | 6.67 | 23.33 | 18.33 |
| Milwaukee | — | 37 | — | 18.90 | 10.81 | — | 16.21 | — |
| Providence | 101,000 | 24 | 12.39 | 25.00 | — | 4.17 | 16.67 | — |
| New Haven | 60,000 | 16 | 18.90 | 12.50 | — | — | 12.50 | — |
| Charleston | 57,000 | 39 | 36.66 | 10.26 | 2.56 | 5.12 | — | — |
| Nashville | 27,000 | 12 | 23.17 | 16.67 | — | 16.67 | — | — |
| Lowell | 53,900 | 14 | 18.69 | 14.29 | — | 7.15 | 7.15 | — |
| Worcester | 52,500 | 13 | 12.91 | 15.38 | 1.69 | — | — | — |
| Cambridge | 51,400 | 21 | 21.29 | 14.29 | 4.76 | 4.76 | — | 4.76 |
| Fall River | 45,500 | 10 | 10.75 | 20.00 | 10.00 | — | — | 20.00 |
| Lawrence | 38,200 | 13 | 17.75 | 23.07 | 7.69 | — | — | 7.69 |
| Lynn | 34,900 | 13 | 19.94 | 15.38 | — | — | 7.69 | — |
| Springfield | 31,500 | 9 | 14.90 | 44.44 | — | — | 22.22 | 22.22 |
| New Bedford | 27,000 | 10 | 19.81 | — | — | — | — | — |
| Salem | 26,400 | 10 | 19.75 | 10.00 | — | — | 10.00 | — |
| Somerville | 23,850 | 5 | 11.17 | 20.00 | 20.00 | — | — | — |
| Chelsea | 20,800 | 2 | 5.01 | 100.00 | — | — | 50.00 | — |
| Taunton | 20,200 | 5 | 12.91 | — | 20.00 | — | — | — |
| Holyoke | 18,200 | 8 | 22.92 | 12.50 | — | — | — | 12.50 |
| Glocester | 17,100 | 4 | 12.20 | — | 25.00 | — | — | — |
| Newton | 17,100 | 5 | 15.25 | — | 20.00 | — | — | — |
| Haverhill | 16,800 | 10 | 34.08 | 50.00 | 10.00 | — | 50.00 | — |
| Newburyport | 18,500 | 4 | 15.45 | — | — | — | — | — |
| Pittsburg | 12,500 | 1 | 4.17 | — | 100.00 | — | — | — |

Two thousand and eighty-five deaths were reported: 383 from the principal "zymotic" diseases, 347 from consumption, 121 from pneumonia, 110 from diarrhoeal diseases, 90 from diphtheria and croup, 83 from scarlet fever, 42 from bronchitis, 28 from typhoid fever, 24 from whooping-cough, 13 from cerebro-spinal meningitis, 11 from malarial fevers, 10 from measles, six from erysipelas, five from remittent fever, four from pleurisy, one from intermittent fever and one from typho-malarial fever, none from small-pox (five cases are reported from Richford, small town in the extreme north of Vermont). In the mortality from measles, cerebro-spinal meningitis, diphtheria and croup, whooping-cough, typhoid fever, pneumonia, and bronchitis, there is no noteworthy change; the decrease in scarlet fever and erysipelas continues; there is a slight increase in consumption, moderate from "zymotic" diseases and all causes, while the fatality from diarrhoeal diseases is nearly double that of the previous week. In the nineteen cities of Massachusetts, with an estimated population of 880,850, there is shown a gradual increase in diarrhoeal diseases, a decrease in scarlet fever, and no other noteworthy change.

From *bronchitis*, 18 deaths were reported in New York, six in Brooklyn, four in Philadelphia and Boston, two in Milwaukee, one in Chicago, St. Louis, Baltimore, District of Columbia, Buffalo, Providence, Cambridge, and Salem. From *typhoid fever*, ten in Philadelphia, four in New York and Chicago, three in Cincinnati, two in Boston and Lawrence, one in Baltimore, Buffalo, and Cambridge. From *whooping-cough*, eight in New York, two in Philadelphia, Brooklyn, and Charleston, one in Chicago, St. Louis, Baltimore, Boston, Cincinnati, District of Columbia, Pittsburgh, Buffalo, Providence, and Chelsea. From *cerebro-spinal meningitis*, two in Baltimore, Buffalo, and Worcester, one in New York, Philadelphia, Cincinnati, Cleveland, Milwaukee, Lynn, and Somerville. From *malarial fevers*, seven in New York, five in Brooklyn, four in St. Louis, one in Baltimore and District of Columbia. From *measles*, six in New York, two in Cleveland, one in Brooklyn and Baltimore. From *erysipelas*, two in Buffalo, one in New York, Brooklyn, St. Louis, and Boston. The death-rate of the colored population in the District of Columbia was more than double that of the whites.

The weather was generally reported cooler and changeable, with light rains, the meteorological record for the week in Boston (latitude $42^{\circ} 41'$, longitude $71^{\circ} 4'$) being as follows: —

| Date | Barom- eter. | | Thermom- eter. | | Relative Humidity. | | | | Direction of Wind. | | | | Velocity of Wind. | | | | State of Weather. ¹ | | | | Rainfall. | |
|--------|-----------------|-------|-------------------|----------|-----------------------|---------|---------|---------|-----------------------|---------|---------|---------|----------------------|---------|---------|---------|-----------------------------------|---------|-----------|----------------------|-----------|--|
| | Mean. | Mean. | Mean. | Maximum. | Minimum. | 7 A. M. | 2 P. M. | 9 P. M. | Mean. | 7 A. M. | 2 P. M. | 9 P. M. | 7 A. M. | 2 P. M. | 9 P. M. | 7 A. M. | 2 P. M. | 9 P. M. | Duration. | Amount in inches. | | |
| June 1 | 29.913 | 83 | 96 | 67 | 77 | 35 | 59 | 57 | SW | SW | SW | SW | 10 | 16 | 12 | C | F | C | — | — | | |
| " 2 | 29.916 | 70 | 91 | 55 | 72 | 55 | 72 | W | W | W | W | 6 | 12 | 14 | F | O | R | — | .08 | | | |
| " 3 | 30.078 | 50 | 55 | 49 | 100 | 100 | 100 | 100 | E | NE | NE | NE | 15 | 14 | 9 | R | R | R | — | .50 | | |
| " 4 | 29.896 | 69 | 66 | 50 | 100 | 97 | 91 | 96 | O | S | S | S | 0 | 7 | 4 | R | R | F | — | .88 | | |
| " 5 | 29.883 | 68 | 75 | 56 | 77 | 53 | 77 | 69 | SW | SW | SW | SW | 6 | 12 | 1 | F | O | F | — | .48 | | |
| " 6 | 29.764 | 63 | 77 | 58 | 72 | 74 | 66 | 67 | O | O | W | W | 0 | 0 | 20 | O | F | F | — | .35 | | |
| " 7 | 30.014 | 54 | 62 | 46 | 68 | 28 | 56 | 49 | NW | NW | W | W | 15 | 17 | 4 | C | F | F | — | .05 | | |
| Week. | 29.916 | 64 | 96 | 46 | | 73 | | | SW | | | | 1629 | | | | | | | 45 | 2.8 | |

¹ O., cloudy; C., clear; F., fair; G., fog; H., hazy; S., smoky; R., rain; T., threatening.

For the week ending May 17th, in 144 German cities and towns, with an estimated population of 7,315,369, the death-rate was 28.4, an increase of 0.1 over the previous week, indicating a decrease in consumption, diphtheria and croup, and typhus fever, an increase in scarlet fever, measles, and typhoid fever, while the other prominent diseases remained about the same. Three thousand nine hundred and ninety-three deaths were reported: 590 from consumption, 507 from acute diseases of the respiratory organs, 211 from diarrhoeal diseases, 102 from diphtheria and croup, 62 from typhoid fever, 61 from scarlet fever, 56 from whooping-cough, 45 from measles, 21 from puerperal fever, seven from typhus fever, two from

small-pox (Berlin and Augsburg). The death-rates ranged from 14.7 in Mannheim to 45.4 in Augsburg. Königsberg 32.2; Dantzig 21.2; Breslau 30.6; Munich, 40.5; Dresden 27.8; Cassel 20.2; Berlin 24.4; Leipsic 24.6; Hamburg 31.3; Hanover 27.8; Bremen 30.4; Cologne 24.6; Frankfort-on-the-Main 23.9; Darmstadt 19.7. Also for the same week, Vienna 33.6; Prague 44.4; Paris 27.7; Odessa, 30.7.

For the week ending May 24th, in the 20 English cities and towns having an estimated population of 7,383,999, the death-rate was 21.4, a decrease of 1.0 from the previous week, with a decline in the mortality from respiratory diseases, diphtheria, scarlet fever, and fever; a very slight increase in measles and whooping cough, considerable in diarrhoea, and nearly trebled in small-pox (London). Three thousand and twenty-nine deaths were reported: 327 from diseases of the respiratory organs, 109 from whooping-cough, 79 from scarlet fever, 75 from measles, 38 from fever, 35 from diarrhoea, 17 from small-pox, 12 from diphtheria. The death-rates ranged from 16.3 in Brighton to 25.1 in Norwich; 21.6 in London; 17.4 in Bristol; 23.1 in Birmingham; 23.8 in Liverpool; 24.1 in Manchester; 18.6 in Leeds. In Edinburgh the rate was 24; in Glasgow 21, in Dublin 35 (small-pox declining).

The sanitary condition of Astrachan and vicinity is reported to be good; typhus fever has become less prevalent. There is a slight increase in small-pox in the large cities of Europe where it prevails, and a decrease in Poland.

RECENT BOOKS AND PAMPHLETS.—*Diseases of the Throat and Nasal Passages. A Guide to the Diagnosis and Treatment of Affections of the Pharynx, Oesophagus, Trachea, Larynx, and Nares.* By J. Solis Cohen, M. D. New York: William Wood & Co. 1879. Pp. 742. (From A. Williams & Co.)

Posological Table, including all the Official and the most frequently employed Unofficial Preparations. By Charles Rice, Chemist, etc. New York: William Wood & Co. 1879. Pp. 93. (A. Williams & Co.)

Alternating Anterior and Posterior Version of the Uterus. By Samuel C. Busey, M. D. Washington, D. C. 1879. (Reprint from Vol. III. *Gynæcological Transactions*.)

Transactions of the Rhode Island Medical Society for the Years 1878-79. Vol. II. Part Second. Published by the society.

Atlas of Histology. By E. Klein, M. D., F. R. S., and E. Noble Smith, L. B. C. P., M. R. C. S. Part III. Philadelphia: J. B. Lippincott & Co. London: Smith, Elder & Co. 1879.

A Guide to Therapeutics and Materia Medica. By Robert Farquharson, M. D. Edin., F. R. C. P. Lond. Second American Edition, enlarged and adapted to the United States Pharmacopœia by Frank Woodbury, M. D. Philadelphia: Henry C. Lea. 1879. (A. Williams & Co.)

The Treatment of Spinal Disease. By E. H. Coover, M. D. (Reprint from *Virginia Medical Monthly*, May, 1879.)

Minutes of the Meeting of Organization and Proceedings of the Sanitary Council of the Mississippi Valley. Chicago, Ill. 1879.

Color-Blindness: Its Dangers and its Detection. By B. Joy Jeffries, A. M., M. D., etc. Boston: Houghton, Osgood & Co. Cambridge: Riverside Press. 1879.

The Toner Lectures, Instituted to Encourage the Discovery of New Truths for the Advancement of Medicine. Lecture VII. The Nature of Reparatory Inflammation in Arteries after Ligature, Acupressure, and Torsion. By E. O. Shakespeare, A. M., M. D. Delivered June 27, 1878. Washington: Smithsonian Institution. April, 1879.

On Spasmodic Stricture of the Urethra. A Reply to Dr. F. N. Otis. By Henry B. Sands, M. D.

Ueber den Zuckergehalt des Blutes. Von Dr. A. M. Bleile, Columbus, O. (Archiv für Anatomie und Physiologie.) 1879.

The Fifty-Fifth Annual Report of the Officers of the Retreat for the Insane at Hartford, Conn. April, 1879.

Some Points in Connection with the Treatment of Sterility. By A. Reeves Jackson, A. M., M. D. (Gynæcological Transactions.) 1879.